

**0761: TRANEXAMIC ACID ADMINISTRATION IN MAJOR TRAUMA**

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**Introduction:** The CRASH-2 trial in 2010, demonstrated that early administration post injury (<3hrs) of tranexamic acid (TXA) significantly reduced all-cause mortality in major trauma patients with significant haemorrhage. The purpose of my audit was to assess compliance with the following standard: 100% of trauma patients requiring blood transfusion should have had TXA < 3 hours after injury and have received a maintenance dose.

**Methods:** All major trauma patients admitted to The Queen Elizabeth Hospital Birmingham, a major trauma centre, over a 3-month period, were identified using information from the trauma audit and research network database. From these, patients receiving a transfusion were analysed to the audit standard.

**Results:** 163 trauma patients were identified. Of those trauma patients requiring blood transfusion (13), 77% received TXA <3 hours. 23% of major trauma patients requiring blood transfusion were not given TXA at all. 31% of patients requiring blood transfusion did not have the 2<sup>nd</sup> dose of TXA.

**Conclusions:** TXA should be given as early as possible to bleeding trauma patients. For trauma patients admitted late after injury, TXA is less effective and could be harmful. TXA should be considered in a pre-hospital setting so as not to delay administration.

**0783: PROSPECTIVE OBSERVATIONAL STUDY OF PRACTICE AND OUTCOME OF EMERGENCY APPENDECTOMIES IN A SINGLE CENTRE**

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**Introduction:** Appendectomy is one of the most common surgical procedures performed in the UK, however variations in management exist between hospitals. The aim of the present study was to investigate current practice and outcome in a single centre.

**Methods:** A prospective study of all patients undergoing appendectomy over a 3.5 month period (September to December 2013) in a single centre was undertaken.

**Results:** A total of 31 appendectomies were performed; median age 23yrs, 9(29%) were female. Preoperative imaging was performed in 16 patients (CT 5(31%), USS 2(13%), plain radiography 9(56%)) with radiographic evidence of appendicitis in 7(43%). 23(74%) had an elevated preoperative WCC or C-reactive protein. 9(29%) procedures were attempted laparoscopically, there was 1 conversion to open. Median duration of anaesthesia was 85 minutes (open 80minutes, laparoscopic 100minutes). The negative appendectomy rate was 16% (5 patients). Median length of hospital stay was 3 days. 5(16%) patients had adverse events within 30-days, of which 2 required surgical or radiological intervention.

**Conclusions:** Current practice for appendectomy in our hospital is comparable to national figures in terms of negative appendectomy rate and post-operative complications. The low level of laparoscopy may be related to the disproportionately low number of females within the present study.

**0836: EMERGENCY ABDOMINAL WALL HERNIA REPAIRS: PATIENT CHARACTERISTICS AND OUTCOMES**

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**Introduction:** Elective anterior abdominal wall hernia repairs are amongst the most commonly performed general surgery operations, usually as day-cases with <1% mortality. Despite an efficient "18-week" rule NHS hernia repair service, patients still present as emergencies. Our aim is to study the patient population presenting as emergencies and their outcomes.

**Methods:** We identified all patients admitted as emergencies with an obstructed/strangulated hernia between 01/04/2010-31/03/2012 at one NHS hospital covering a population of 310,000 and reviewed patient records regarding the nature of the hernia and outcome.

**Results:** Eighty-nine patients were admitted with an obstructed/strangulated hernia. Median age 64 years (26-94). 93% were primary hernias, 7% were recurrent. The commonest type was paraumbilical (40%), followed by inguinal (27%), femoral (11%), incisional (11%), other (11%). 98% of patients underwent emergency repair, of which 16% required bowel resection.

Median length of stay was 4 nights (0-33). 9 patients (10%) required ITU admission post-operatively. Mortality was 5.6% (n=5)

**Conclusions:** Paraumbilical hernias constitute the majority of emergency admissions, most likely because they are often small, minimally symptomatic and do not contain bowel; thus these patients are often not offered elective surgery. Emergency hernia repairs are associated with significant bowel resection rates, prolonged hospital stay and mortality rates of nearly 6%.

**0846: EVALUATING THE MANAGEMENT OF SURGICAL PATIENTS REQUIRING EMERGENCY LAPAROTOMIES AT A MEDIUM-SIZED GENERAL HOSPITAL**

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**Introduction:** To examine perioperative care delivered to patients requiring unscheduled laparotomies. Audit standards taken from an existing care bundle - ELP QuIC - based on guidance provided by RCEng and NCEPOD for the management of patients requiring emergency surgery.

**Methods:** Retrospective analysis of 29 consecutive patient admissions from clinical records coded for obstruction/ perforation/ peritonitis that had an unscheduled laparotomy between July and December 2012.

**Results:** Results were based on the following points of care identified in the ELP QuIC Care Bundle: 1. Most initial assessment and resuscitation was performed by junior doctors with average 4 hour wait to ST3+ review. 2. 50% were inadequately managed where septic.

3. Patients waited an average of 4.5 hours from decision to CT scan to being scanned. Median wait to theatre was 4.45 hours. 4. No evidence of goal directed fluid therapy being used peri-operatively in these patients. 5. Only 44% of patients were admitted to critical care postoperatively.

**Conclusions:** This audit demonstrates a role for the use of a care bundle for unscheduled laparotomies to deliver standardised best practice and improve patient outcomes by reducing length of stay and mortality rate. Trial of an emergency laparotomy care bundle is ongoing.

**0912: SYSTEMATIC REVIEW OF SEASONAL VARIATIONS IN THE INCIDENCE OF APPENDICITIS**

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**Introduction:** This study synthesised published data to investigate potential seasonal variations of appendicitis.

**Methods:** A systematic review was performed following PRISMA methodology to identify studies reporting seasonal variation of acute appendicitis. No language or year restrictions were applied.

**Results:** Twenty-one cohort studies were identified, reporting data for >1.5 million patients. Fifteen studies analysed ≥5-years of data. Studies originated from North America (n=8), Asia (n=7), Europe (n=4) and Africa (n=2). Of 20 studies reporting seasonal variation, 17 identified excess incidence in the summer months. Of 18 studies reporting a nadir in the rate of appendicitis, 15 found this in the winter months, 2 in spring and 1 in autumn. From 3 studies there were no differences in seasonal patterns between males and females. Two studies found no differences in patterns between perforated and non-perforated appendicitis. One study comparing children and adults found that adults' peak incidence was in summer, whereas children's was in winter.

**Conclusions:** Appendicitis demonstrates seasonal variation with peak incidence in the summer months and a nadir in winter. This finding is consistent across the world. Further studies are required to determine the aetiology of this variation, for example climatic or other environmental factors.

**0917: ACCURACY OF IDENTIFICATION OF NEGATIVE APPENDICECTOMY BY CLINICAL CODING AT A DISTRICT GENERAL HOSPITAL**

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**Introduction:** Following discharge, patients' diagnoses and procedures are coded using standardised classifications. The Hospital Episode Statistics (HES) database is built upon these codes. The aim of this study was to determine the accuracy of clinical coding in identifying negative appendectomies.